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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,419	10/23/2003	J. Rodney Walton	020554	2594
23596 7590 02/05/2009 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121				
EXAMINER				
SMITH, MARCUS				
ART UNIT		PAPER NUMBER		
2419				
NOTIFICATION DATE		DELIVERY MODE		
02/05/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/693,419

Applicant(s)

WALTON ET AL.

Examiner

MARCUS R. SMITH

Art Unit

2419

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 116-125 and 217-221 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 116-125, and 217-221 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date 11/18/08
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, filed 11/11/08, with respect to the rejection(s) of claim(s) 116-125 and 217-221 under 35 U.S.C. 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Gopalakrishnan et al. (US 7,006,464).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 116-125, and 217-221 are rejected under 35 U.S.C. 102 (e) as being anticipated by Gopalakrishnan et al. (US 7,006,464, which will be referred as "Gopal").

With regard to claims 116, 121, and 217, Gopal teaches:

An apparatus (base station) in a wireless multiple-access multiple-input multiple-output (MIMO) communication system (column 7, lines 7-20), comprising:

a transmit data processor operative to

process system parameters (power factors) and a pilot (OVSF) for transmission via a broadcast channel, wherein the pilot is used for channel estimation

(channelization code space) of the downlink (column 3, lines 35-49, Downlink broadcast as referred to as Beacon Control Channel see column 6, lines 25-45, table 3),

process scheduling information for transmission via a forward control channel, wherein the scheduling information is for data transmission on the downlink and an uplink (dedicated downlink channel, see column 3, lines 5-10), and

process traffic data for transmission via a forward channel (downlink shared channel as HS-DSCH, column 5, lines 60-67 and see table 2); and

a receive data processor operative to: process user requests (process feedback information from the wireless unit) received via a random access channel (uplink dedicated physical control or UL-DPCCH, column 3, lines 50-65. The UL-DPCCH is a random access channel because it uses asymmetric transmission time interval since the rate of transmission can vary on the uplink transmission. See column 3, lines 15-30), and process traffic data received via a reverse channel (dedicated uplink dedicated physical data channel or UL DPDCH: column 4, lines 10-16).

With regard to claims 117, 122, and 218, Gopal teaches: wherein the broadcast channel, forward control channel, forward channel, random access channel, and reverse channel are time division multiplexed within a frame having a predetermined time duration (column 2, lines 25-35).

With regard to claims 118, 123, and 219 Gopal teaches: wherein the broadcast channel and the forward control channel are transmitted using a diversity mode supporting data transmission with redundancy from a plurality of transmit antennas (column 2, lines 60-67 to column 3 lines 1-5).

with regard to claims 119, 124, and 220 Gopal teaches: wherein the forward channel and the reverse channel support a diversity mode and a spatial multiplexing mode, the diversity mode supporting data transmission with redundancy from a plurality of transmit antennas, and the spatial multiplexing mode supporting data transmission on a plurality of spatial channels (column 2, lines 60-67 to column 3 lines 1-5).

With regard to claims 120, 125, and 221, Gopal teaches: wherein the random access channel supports a single-input multiple-output (SIMO) mode and a beam-steering mode, the SIMO mode supporting data transmission from a single transmit antenna to multiple receive antennas, and the beam-steering mode supporting data transmission on a single spatial channel associated with a highest rate among a plurality of spatial channels (column 2, lines 60-67 to column 3 lines 1-5).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCUS R. SMITH whose telephone number is (571)270-1096. The examiner can normally be reached on Mon-Thurs: 7:30 am - 5:00 p.m. and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wing Chan can be reached on 571 272-7493. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRS 1/30/09

/Wing F. Chan/
Supervisory Patent Examiner, Art Unit 2419
2/2/09